Vidifox® Document Camera

PV 380

USER MANUAL

Please read this User Manual thoroughly before you use the document camera. Keep the CD-ROM in a convenient place so you can use it quickly if you need to.

Please visit us at http://www.waninusa.com where you can get product support, the latest driver updates, and answers to frequently asked questions (FAQs) and technical questions.

PRECAUTIONS

NOTICES: PLEASE READ CAREFULLY BEFORE USE

- Use the document camera under the rated electric conditions.
- Do not place the document camera on any unstable surface. It may fall and cause injuries or damages.
- Do not place this device directly under sunlight or near heaters.
- Do not place this device near water.
- Keep the camera away from acid or alkali gas.
- Do not place this document camera in humid, dusty, windy or vibrant locations.
- The recommended operating environment is:

  Temperature: 32ºF-113ºF (0ºC--45ºC)

  Humidity: less than 75%
- Always unplug BEFORE cleaning the device. Use a damp soft-cloth for cleaning. Do not use volatile solvent.
- When this equipment functions abnormally, such as smoke, smell, noise, immediately unplug and call for professional assistance.
- Unplug the document camera or shut off the power when not in use.

Legal Notice

FCC Part 15

This device complies with Part 15 of the FCC Rules. Operation of this product is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Compilation and Publication Notice

This manual has been compiled and published to cover the latest product's descriptions and specifications. The contents of this manual and the specifications of this product are subject to change without notice.

Wanin USA reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

© 2010 Wanin USA Inc. All Rights Reserved.

TABLE OF CONTENTS

1. PARTS IDENTIFICATION 4

2. CONTROL PANEL 5

3. INPUTS AND OUTPUTS 6

4. REMOTE CONTROL 7

5. CONNECTIONS 9

5.1. COMPUTER CONNECTION 9
5.2. VGA OUTPUT CONNECTION 10
5.3. C-VIDEO OUTPUT CONNECTION 10
5.4. S-VIDEO OUTPUT CONNECTION 11

6. COMMUNICATE WITH COMPUTER 11

6.1. COMPUTER REQUIREMENTS 11
6.2. CONTROL VIA RS232 11
6.3. USB CAMERA 18

7. FEATURES 31

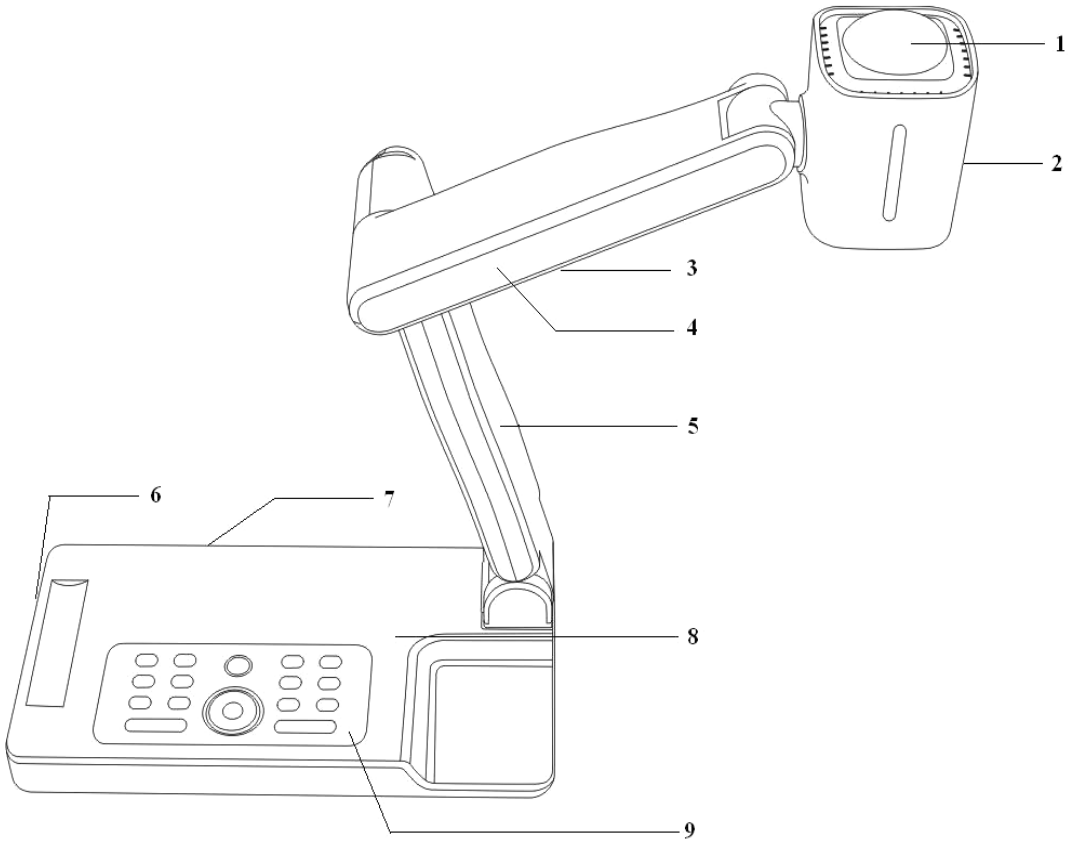
LIGHT 31
ZOOM IN AND ZOOM OUT 31
FOCUS ADJUSTMENT 31
BRIGHTNESS ADJUSTMENT 31
WHITE BALANCE ADJUSTMENT 31
TEXT/PICTURE MODE 31
IMAGE FREEZE 32
IMAGE MIRROR 32
SPLIT SCREEN 32
IMAGE SAVE 32
IMAGE RECALL 32
MULTIPLE INPUTS AND OUTPUTS 33
USB 2.0 PORT 33
USB IMAGE CAPTURE AND VIDEO RECORDING 33
RS232 CONTROL 33

8. SPECIFICATION 33

9. TROUBLE-SHOOTING: 34

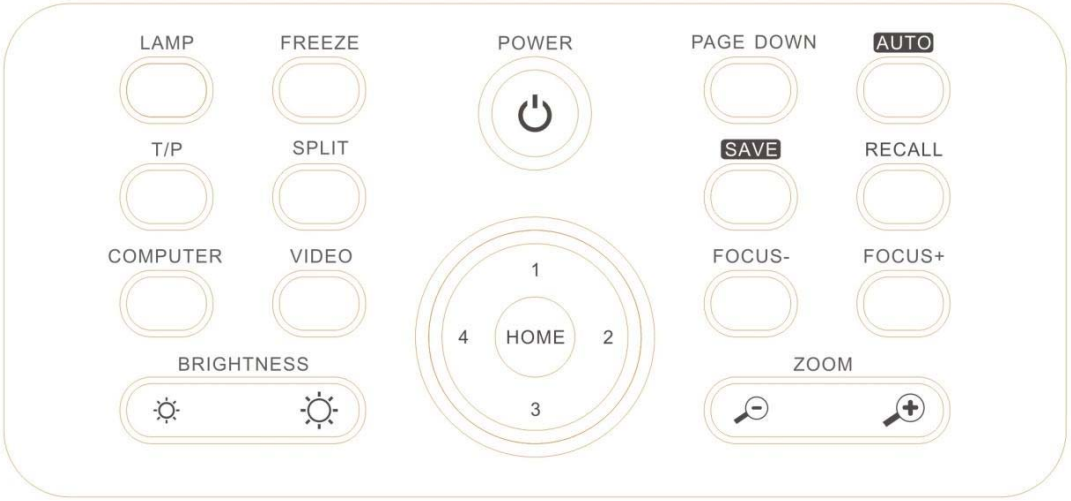
10. PACKING LIST 35

1. PARTS IDENTIFICATION



1. **Remote control IR receiver**
2. **Camera**
3. **LED light box**
4. **Upper mechanical arm**
5. **Main mechanical arm**
6. **Side panel**
7. **Back panel**
8. **Base unit**
9. **Control panel**

2. CONTROL PANEL



1. **POWER**: Turn on/off the power.
2. **HOME**: Activate VGA output terminal, providing the image from camera.
3. **LAMP**: Turn on/off the LED light.
4. **FREEZE**: Freeze/unfreeze the image.
5. **T/P**: Switch the output image between text mode and picture mode.
6. **SPLIT**: Split screen, enable the comparison between the frozen image and live image.
7. **COMPUTER**: Activate the VGA input.
8. **VIDEO**: Activate the C-VIDEO&S-VIDEO output, providing the image from camera.
9. **BRIGHT+/-**: Image brightness adjustment.
10. **PAGE DOWN**: Saved image page down when image recall mode is enabled.
11. **AUTO**: Automatically adjust focus, color and white balance.
12. **SAVE**: Capture and save the current image.
13. **RECALL**: Image recall mode enabled, display the saved images.

    In Image Recall mode:

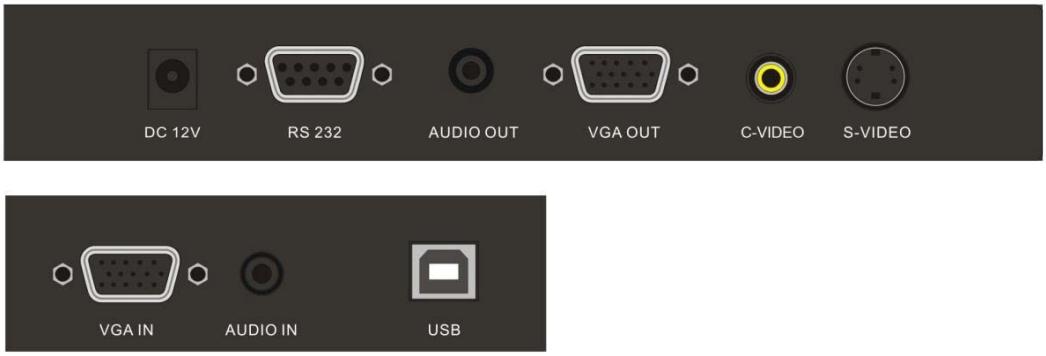
    1: Display the first image.

    2: Display the second image.

    3: Display the third image.

    4: Display the fourth image.
14. **FOCUS+/-**: Adjust focus manually, focus far and focus near.
15. **ZOOM+/-**: Image zoom in and zoom out control.

3. INPUTS AND OUTPUTS



1. **DC 12V**: Power input.

2. **RS 232**: Serial port, to control the document camera from a computer via this port.

3. **AUDIO OUT**: Audio output.

4. **VGA OUT**: VGA (RGB) signal output (15 pin D-SUB).

5. **C-VIDEO**: Composite video output.

6. **S-VIDEO**: S-Video output.

7. **VGA IN**: VGA (RGB) signal input(15 pin D-SUB).

8. **AUDIO IN**: Audio input.

9. **USB**: Capture image into a connected computer via provided software

4. REMOTE CONTROL

1. : Turn the document camera on or off**.**

2. **Computer**: Press this button to output signals from VGA-IN.

3. **Video**: Activate the VIDEO&S-VIDEO output, providing the image from camera.

4. **XGA/SXGA**: Toggle the output format between XGA and SXGA.

5. **Home**: Output the image from the document camera.

6. **Number Buttons**:

In image recall mode:

1: Display the first image.

2: Display the second image.

3: Display the third image.

4: Display the fourth image.

7. : Turn the LED light on or off.

8. **Mir**: Output right-and-left, up-and-down mirror image.

9. **Save**: Capture the current image.

10. **Recall**: Enter the Image Recall mode to display saved images.

11. **Page +/-**: in Image Recall mode, navigate between pages of thumbnail images.

12. **Auto**: Automatic adjust focus, color and white balance.

13. **Split**: Split screen, enable the comparison between the frozen image and live image.

14. **Zoom+/-**: Image zoom in and zoom out control.

15. **Frz**: Freeze/unfreeze the image.

16. **Bri+/-**: Image brightness adjustment.

17. **T/P**: Switch the output image between the text mode and picture mode.

18. **Fc+/-**: Adjust focus manually, focus far and focus near.

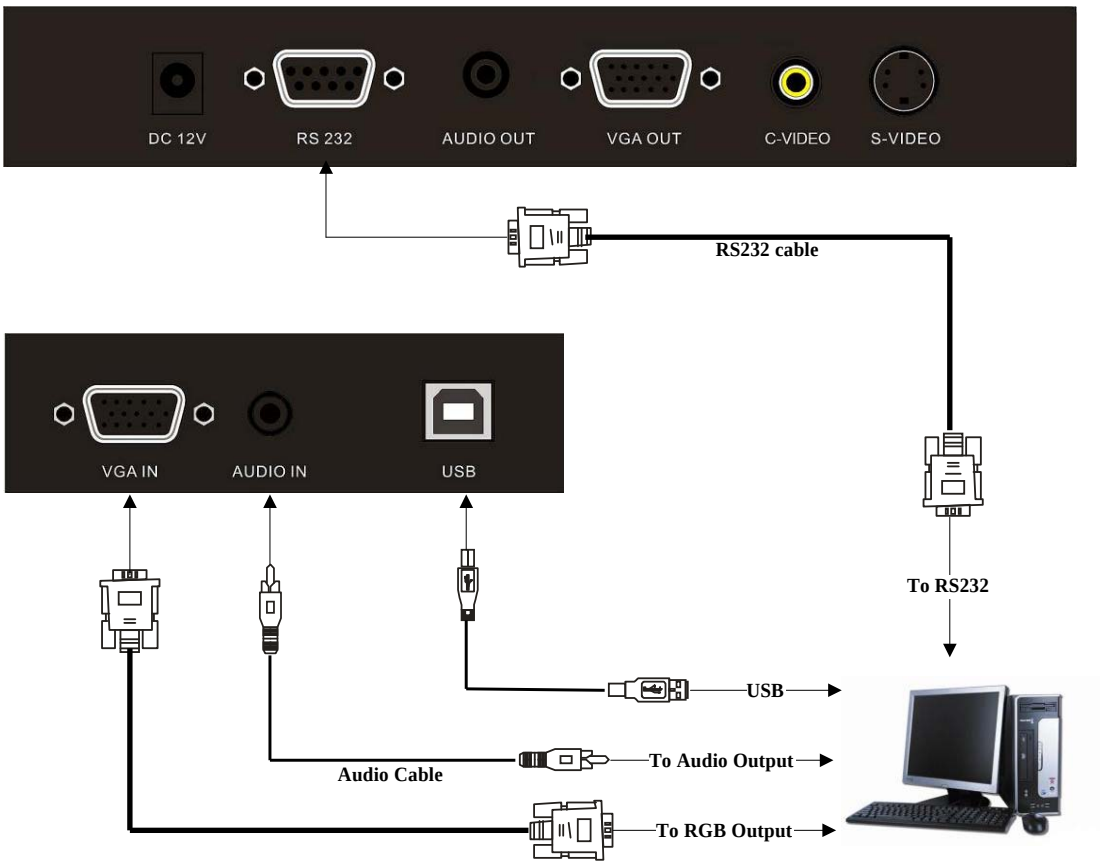
20. **Sharp+/-**: Adjust sharpness of the image.

21. **Blue**+/-: Image color adjustment (blue).

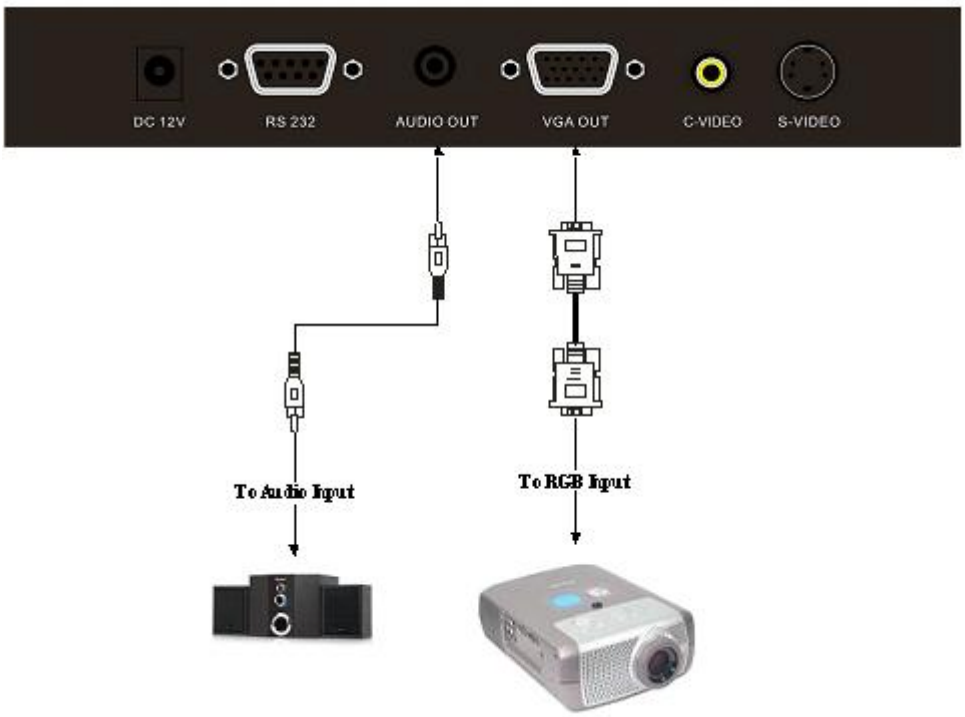
22. **Red**+/-: Image color adjustment (red).

5. CONNECTIONS

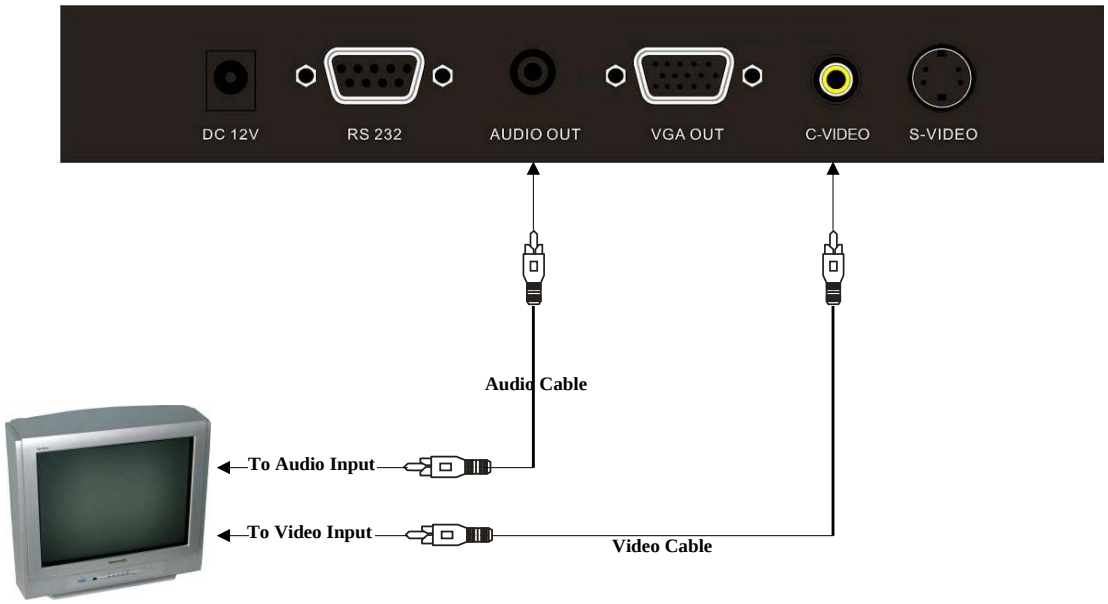
5.1. COMPUTER CONNECTION



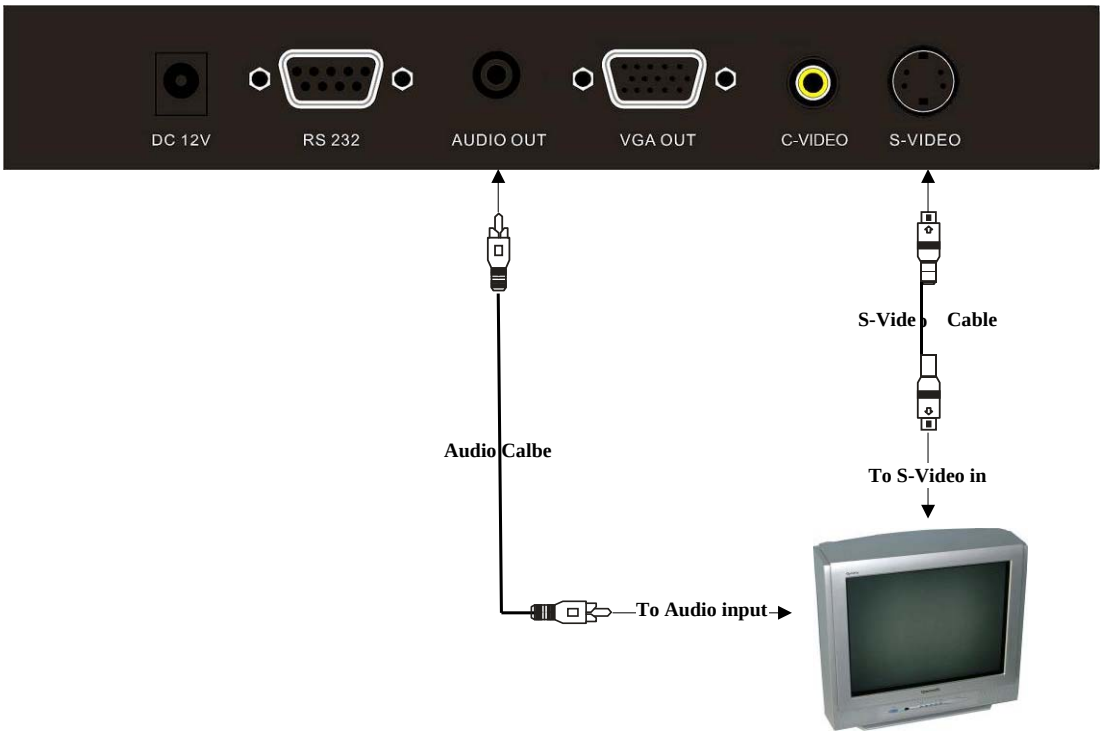
5.2. VGA OUTPUT CONNECTION



5.3. C-VIDEO OUTPUT CONNECTION



5.4. S-VIDEO OUTPUT CONNECTION



6. COMMUNICATE WITH COMPUTER

6.1. COMPUTER REQUIREMENTS

The PC's hardware and software configurations shall not be less than the following requirements：

Operating system: Windows XP

CPU: 1.8 GHz

Physical memory: 512M

Video memory: 64M

6.2. CONTROL VIA RS232

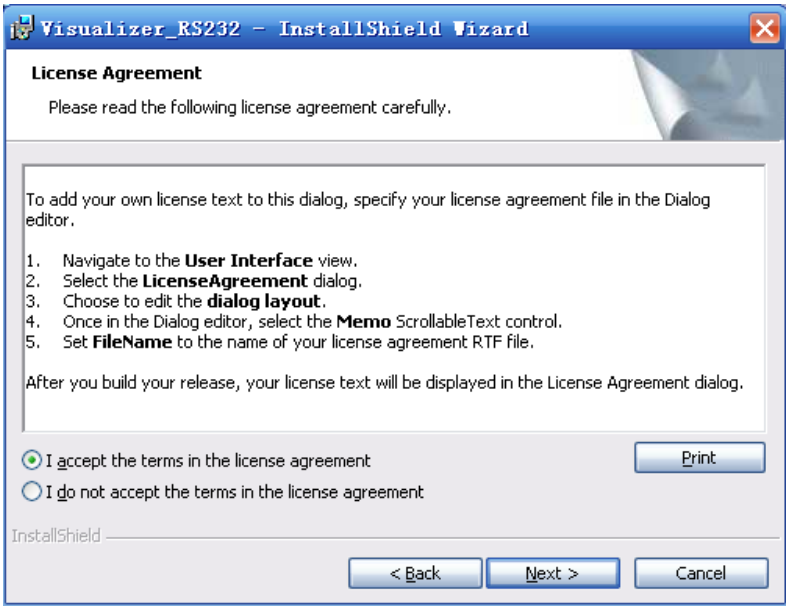
PV 380 can be controlled from a computer via RS232.

1. Double click on the RS232 software in provided CD to run the install shield wizard.

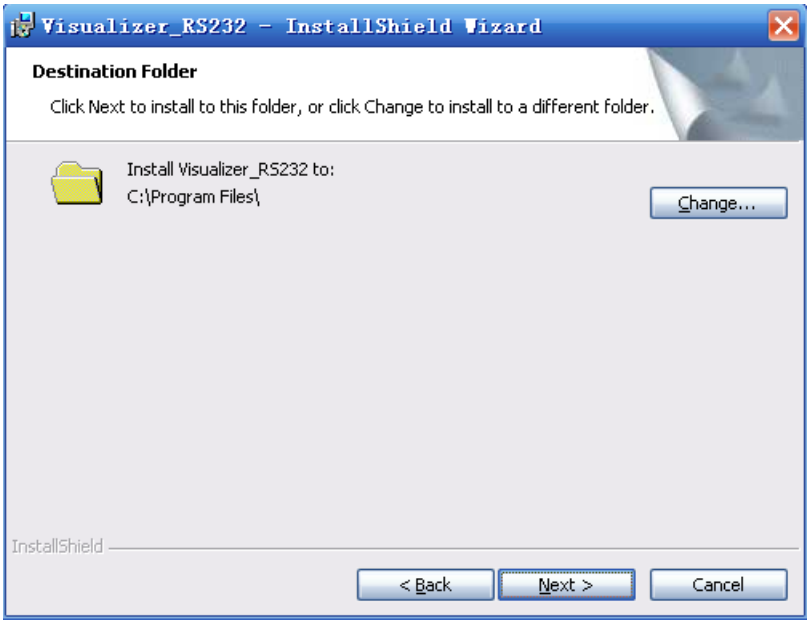
Then you will see the software setup window:

Visualizer_RS232 - InstallShield Wizard
Welcome to the InstallShield Wizard for Visualizer_RS232
The InstallShield(R) Wizard will install Visualizer_RS232 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

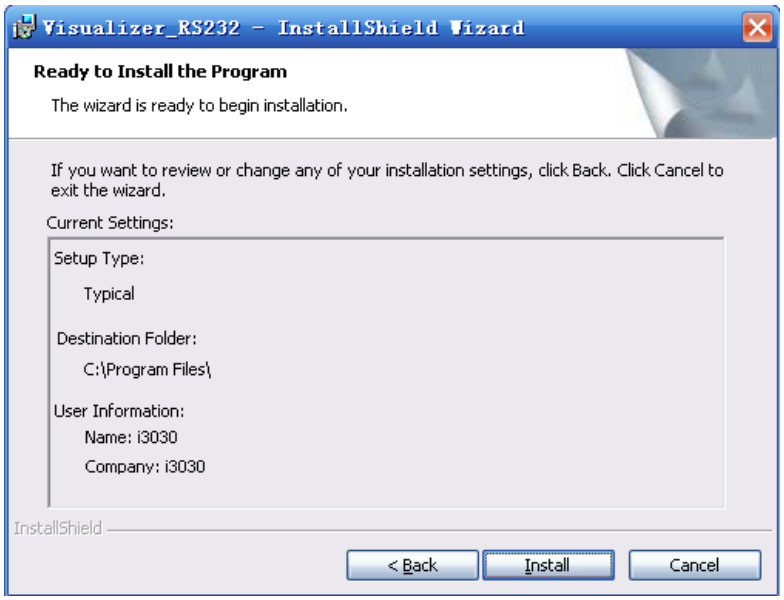
Read terms, select *"I accept the terms in the license agreement*" Click on *Next*:


Visualizer_RS232 - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
To add your own license text to this dialog, specify your license agreement file in the Dialog editor.
1. Navigate to the User Interface view.
2. Select the LicenseAgreement dialog.
3. Choose to edit the dialog layout.
4. Once in the Dialog editor, select the Memo ScrollableText control.
5. Set FileName to the name of your license agreement RTF file.
After you build your release, your license text will be displayed in the License Agreement dialog.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

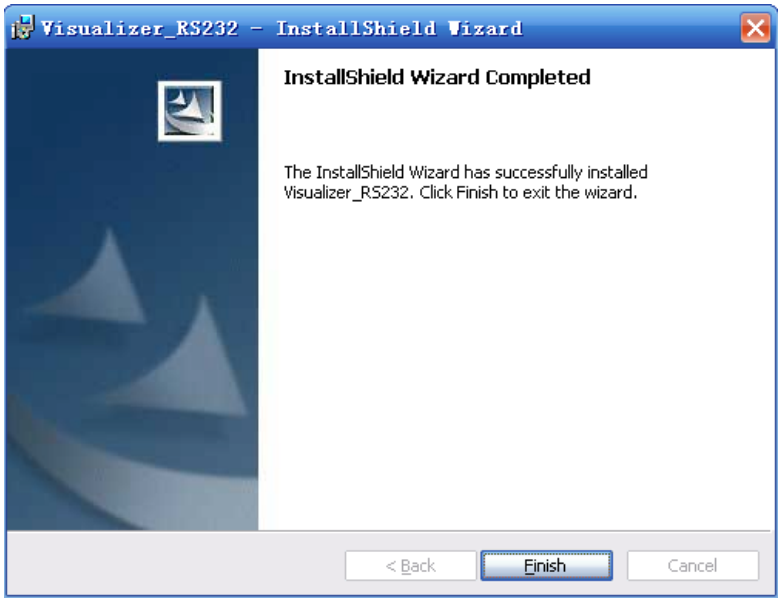
Click on *Change* to change the installation directory if needed, then click on *Next*:



Click on *Install* to install the software to the computer:



Click on Finish, the software installation is complete:


Visualizer_RS232 - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Visualizer_RS232. Click Finish to exit the wizard.
< Back
Finish
Cancel

2. Connect the computer to the PV 380 with a RS232 cable, turn on the power of PV 380.

3. Double click on or click on *start->All Programs->Visualizer_RS232->Visualizer_RS232.exe* to run the RS232 software, You will see the icon on the task bar and the control interface on the top right of the screen:

: Zoom+

: Zoom-

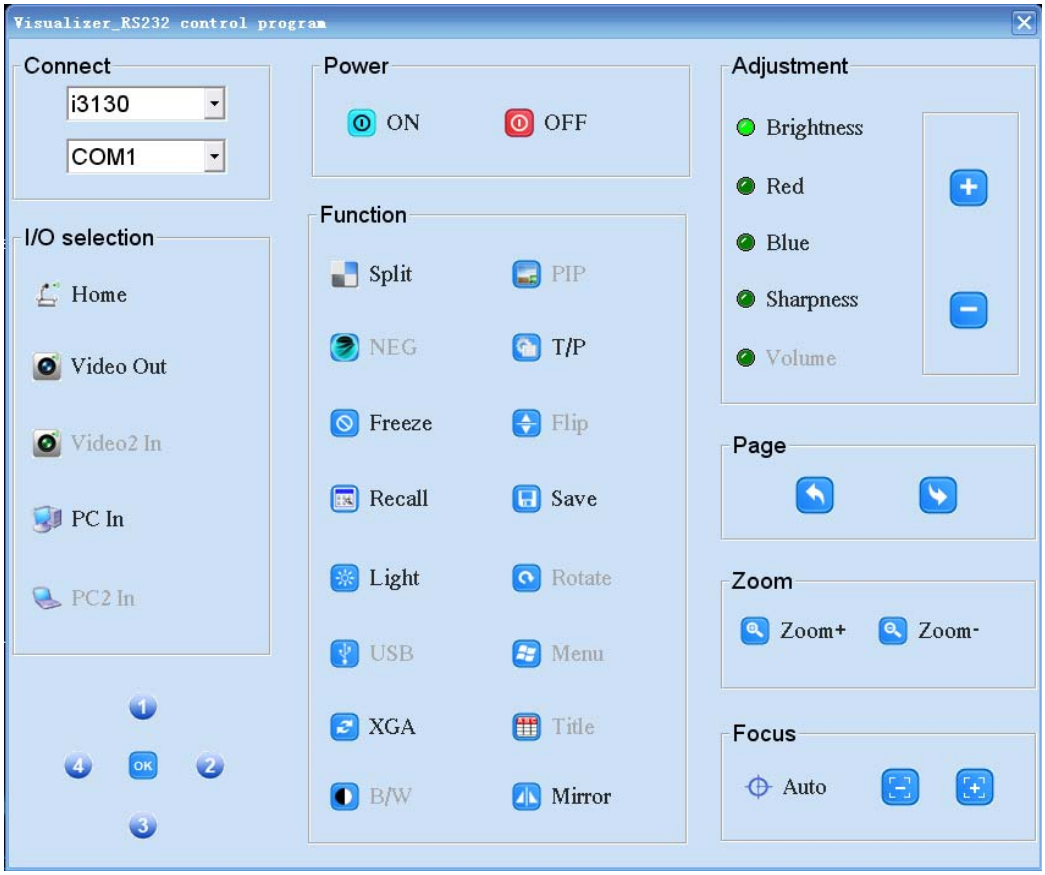
: Auto

: Display all functions

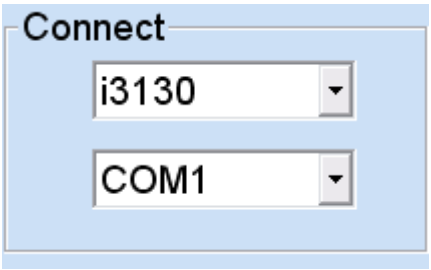
: Minimize

: Close

4. Click on , you will see the following control panel.



5. Properly set the software.



: Select corresponding model number.

: Select the right COM port.

Note:

** If the selected model does not have certain functions, the corresponding buttons in the software interface are displayed in light gray and are not clickable.*

** All models require 15 seconds start-up time to start the software.*

6. Button instruction

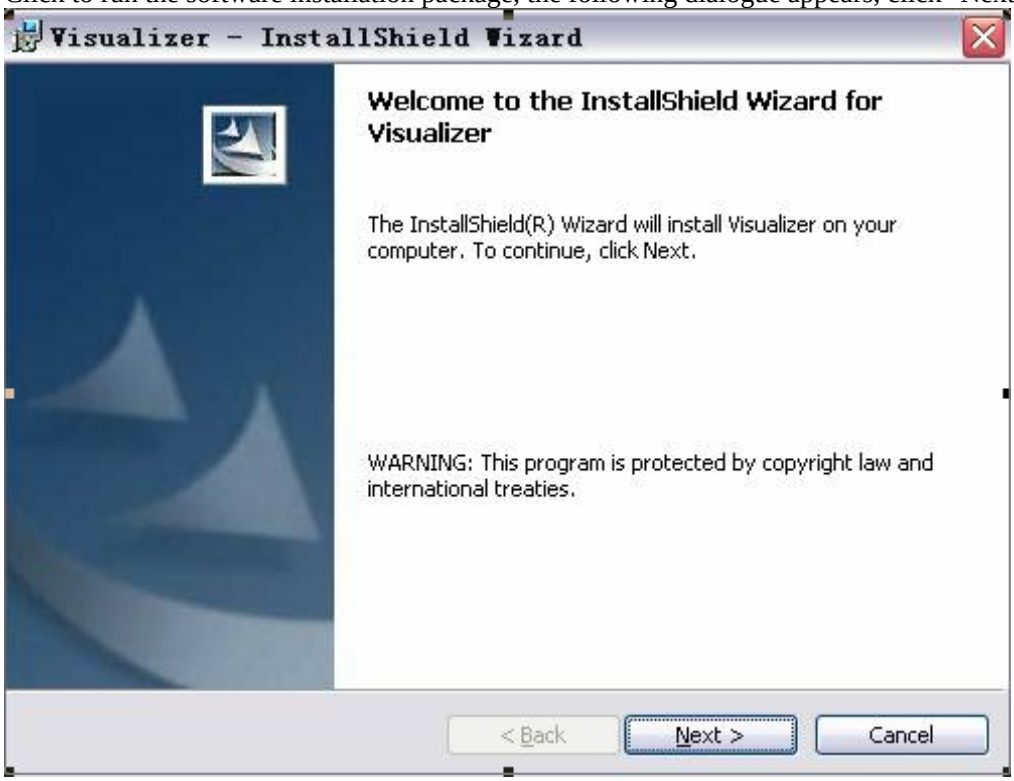
Button	Function
P ower On	Power on the unit
P ower Off	Standby
Home	Switch to visualize mode
Video Out	Switch to Video/S-Video output
P C In	Active PC input
F reeze	Image freeze
Light	Toggle between arm light and no light
B rightness+	Increase the brightness
B rightness-	Decrease the brightness
F ocus+	Focus far
F ocus-	Focus near
Zoom+	Zoom in
Zoom-	Zoom out
P age+	Page up
P age-	Page down
R ed+	Increase the red hue
R ed-	Decrease the red hue
B lue+	Increase the blue hue
B lue-	Decrease the blue hue
S harpness+	Increase the sharpness

S harpness-	Decrease the sharpness
Auto	Auto focus, brightness, and color
S ave	Save image
R ecall	Recall saved images
S plit	Split screen
M irror	Mirror image
T/P	Switch between text and image modes
X GA	Switch between SXGA and XGA output modes
1	Display Image #1(in image recall mode)
2	Display Image #2(in image recall mode)
3	Display Image #3(in image recall mode)
4	Display Image #4(in image recall mode)

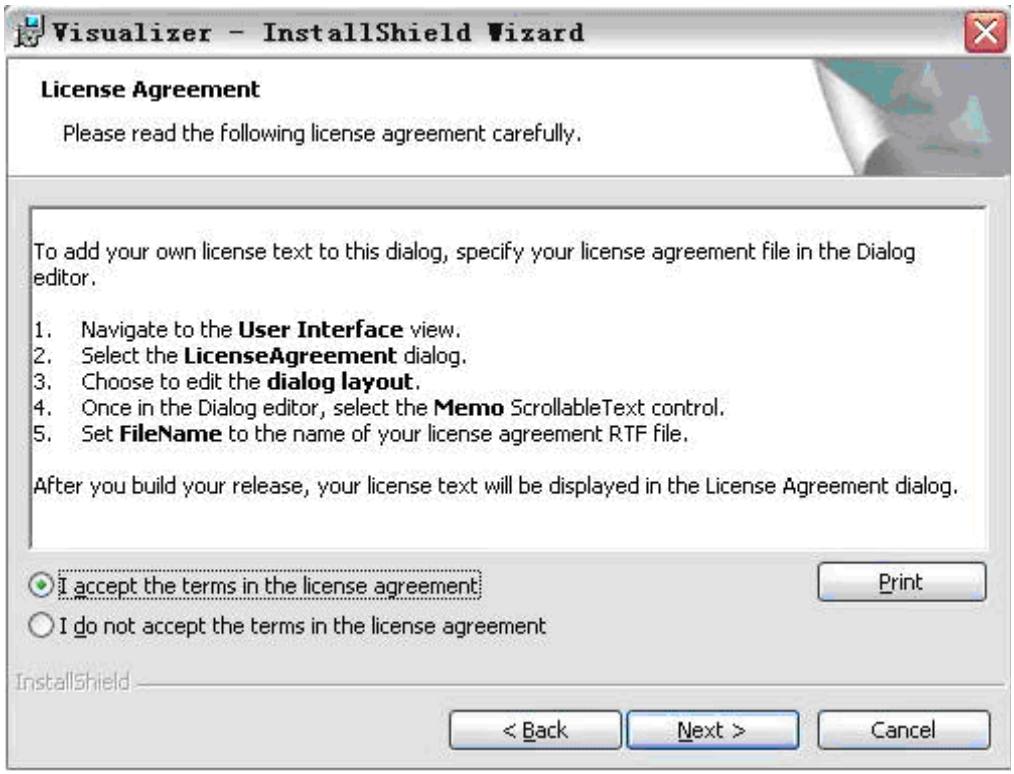
6. 3USB CAMERA

1、SOFTWARE INSTALLATION

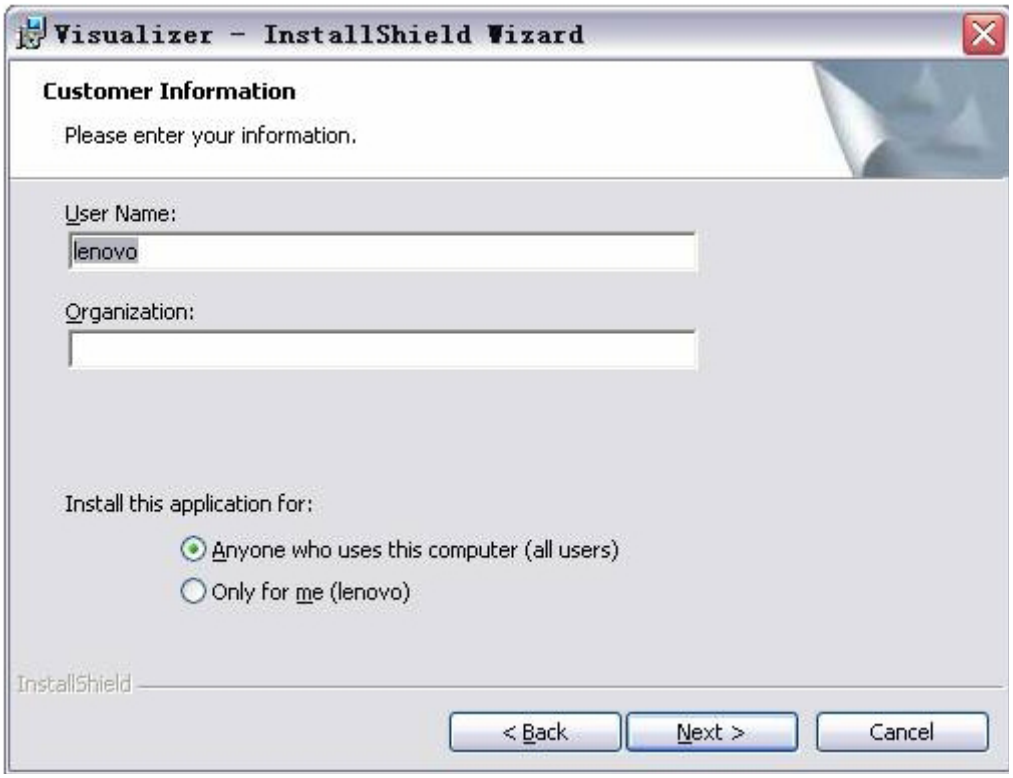
Click to run the software installation package, the following dialogue appears, click "Next":


Visualizer - InstallShield Wizard
Welcome to the InstallShield Wizard for Visualizer
The InstallShield(R) Wizard will install Visualizer on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

Read the terms, Select "I accept the terms in the license agreement." Click "Next", as the following figure.

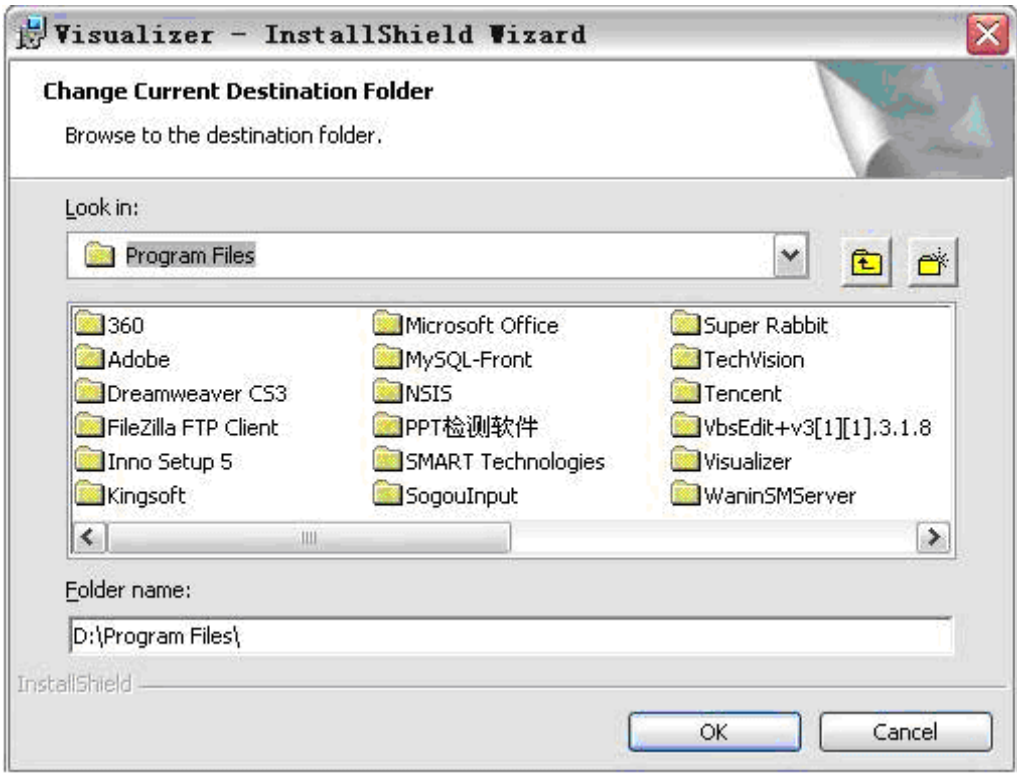

Visualizer - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
To add your own license text to this dialog, specify your license agreement file in the Dialog editor.
1. Navigate to the User Interface view.
2. Select the LicenseAgreement dialog.
3. Choose to edit the dialog layout.
4. Once in the Dialog editor, select the Memo ScrollableText control.
5. Set FileName to the name of your license agreement RTF file.
After you build your release, your license text will be displayed in the License Agreement dialog.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

The following dialogue box appears, click "Next":

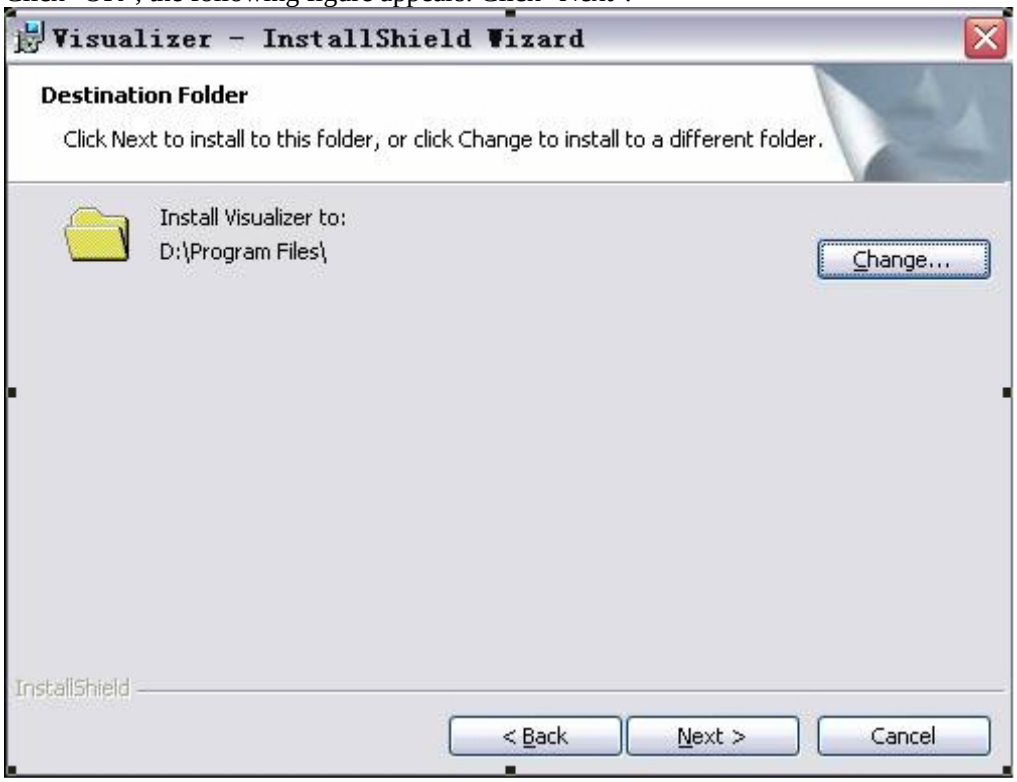


The default installation directory is Program Files, C: \ Program Files \, you can select a different installation directory, as shown:

Click "Change" to change the directory, as shown:



Click "OK", the following figure appears. Click "Next".

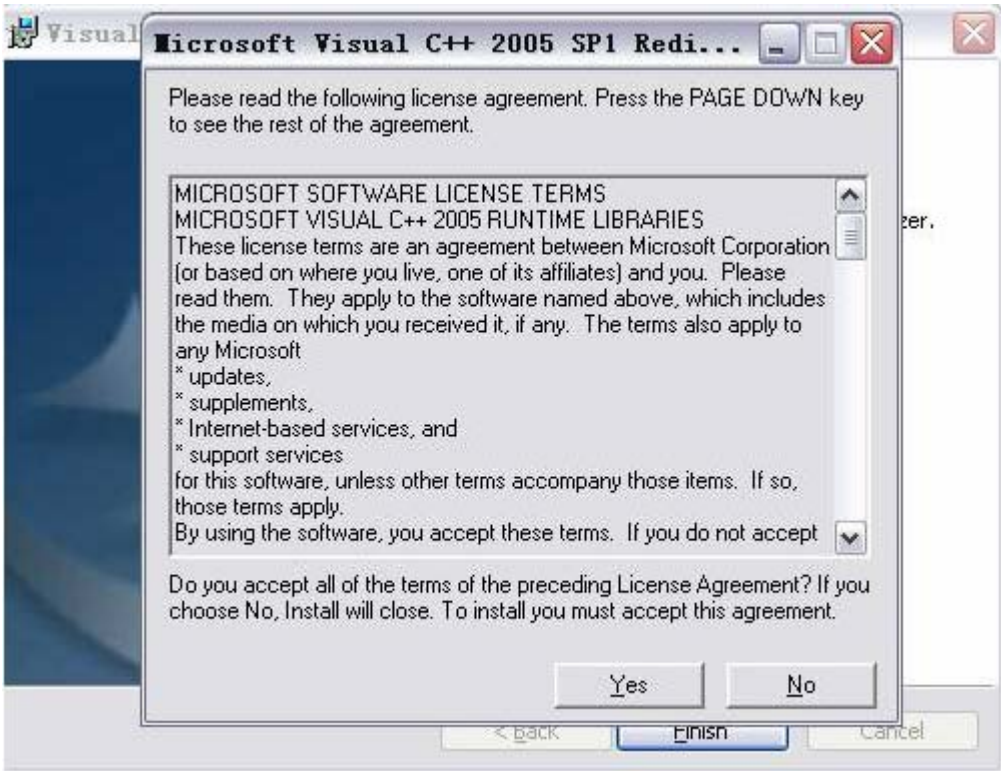


Click "Install" to complete installation, as shown:

Click "Finish" to complete the installation, as shown:

Visualizer - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed Visualizer. Click Finish to exit the wizard.
< Back
Finish
Cancel

Then you will see the following interface, which is an installation package for 2005 environment. If your PC already has this installed, click "No" to exit, otherwise, click "Yes" to install it.


Visual
Microsoft Visual C++ 2005 SP1 Redi...
Please read the following license agreement. Press the PAGE DOWN key to see the rest of the agreement.
MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT VISUAL C++ 2005 RUNTIME LIBRARIES
These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft
* updates,
* supplements,
* Internet-based services, and
* support services
for this software, unless other terms accompany those items. If so, those terms apply.
By using the software, you accept these terms. If you do not accept
Do you accept all of the terms of the preceding License Agreement? If you choose No, Install will close. To install you must accept this agreement.
Yes
No
< Back
Finish
Cancel

2、SOFTWARE START

Double click the short cut

on the desktop, then click Device, select the right model number, see below:

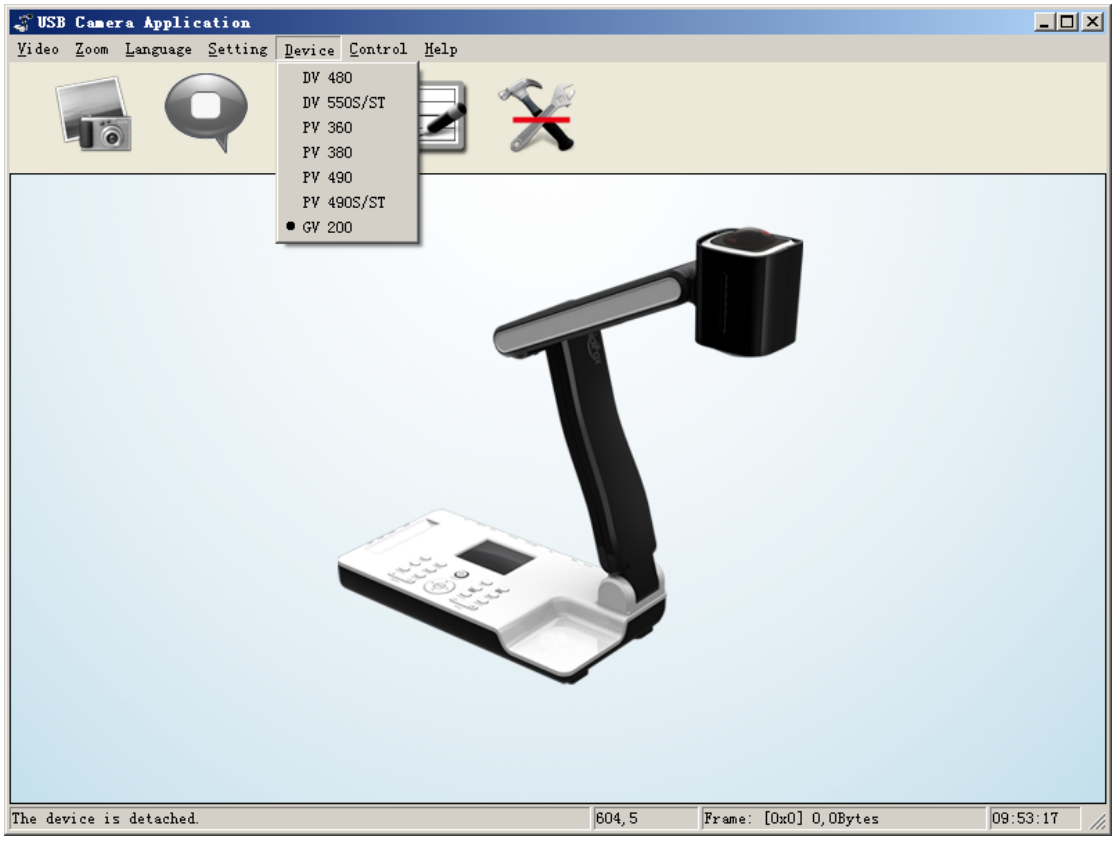
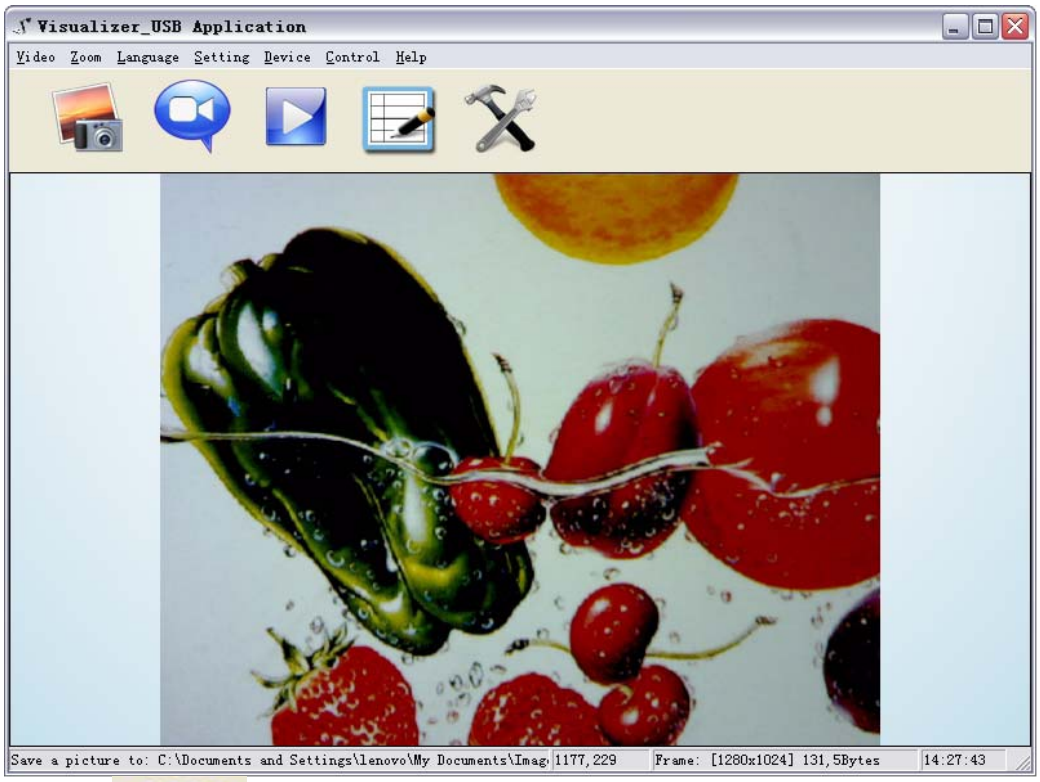


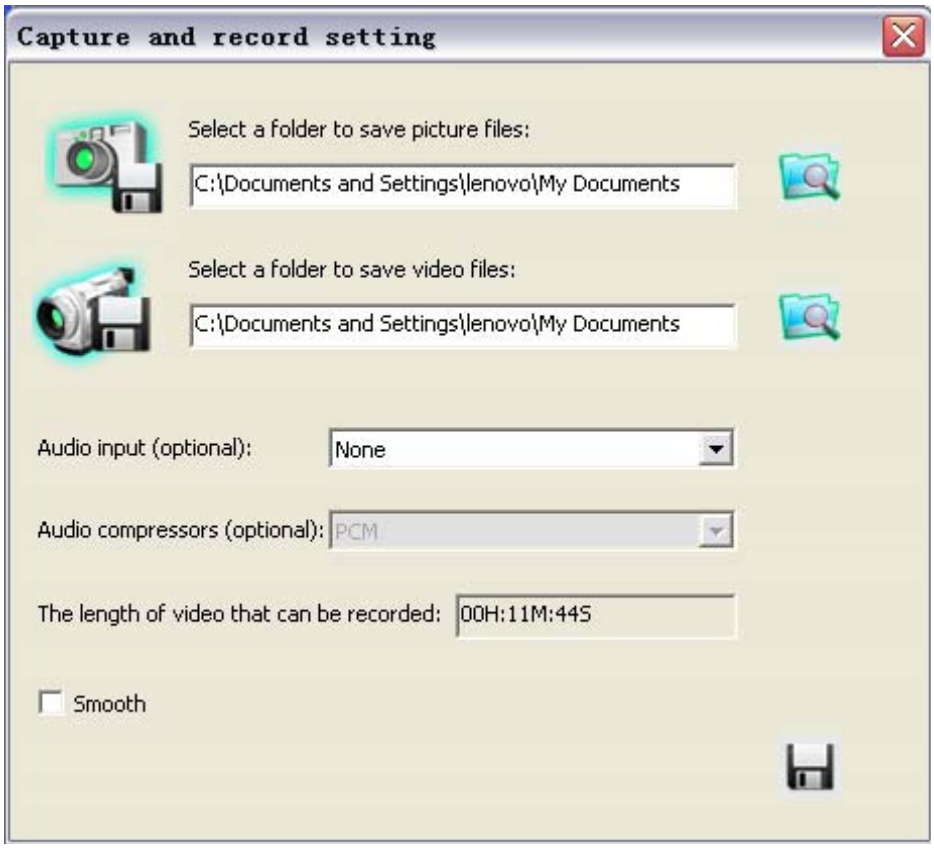
IMAGE CAPTURE AND VIDEO RECORDING：

Left click to capture images. The captured images will be automatically saved into the default destination folder. The path and file name are displayed in software status bar on the bottom of the window. Shown below:



Left click to start recording. The setting button will changes to and does not work.
The detailed information is displayed on the software status bar in the bottom of the window.
The video is automatically saved in the default folder or pre-set folder.

SETTING：
The captured images and recorded videos will be saved into the folders of Images and Videos respectively, which are created by the system automatically. To set a different path to which the image/video is be to saved, click on the left side of the window, a pop up dialog box appears below.

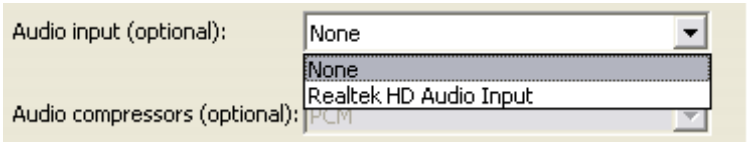


Save the captured images into a different folder

Click the button next to the "select a folder to save picture files" text box to set the path for captured images.

Save the recorded video into a different folder and set up parameters for videos

Click the button next to the "Select a folder to save video files:" text box to set the path for videos. You can also change the video settings. The Audio input (optional) drop down box offers the options of recording video with or without sound. Shown below:

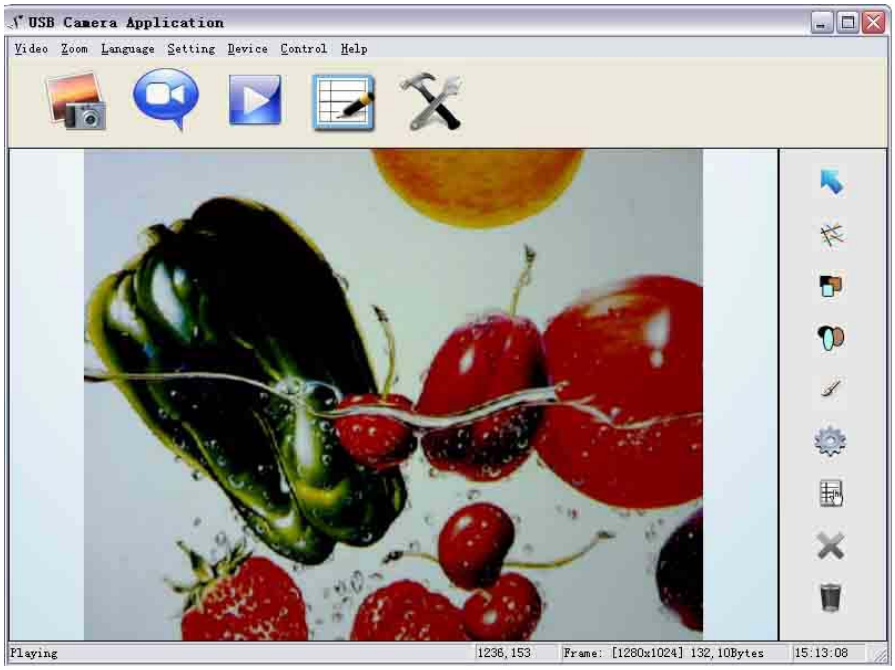


The length of video that can be recorded box displays the longest recording time for videos to be saved in the preset path. Shown below:

Click save to complete setting.

IMAGE MODIFY：

Click , you will see the interface:

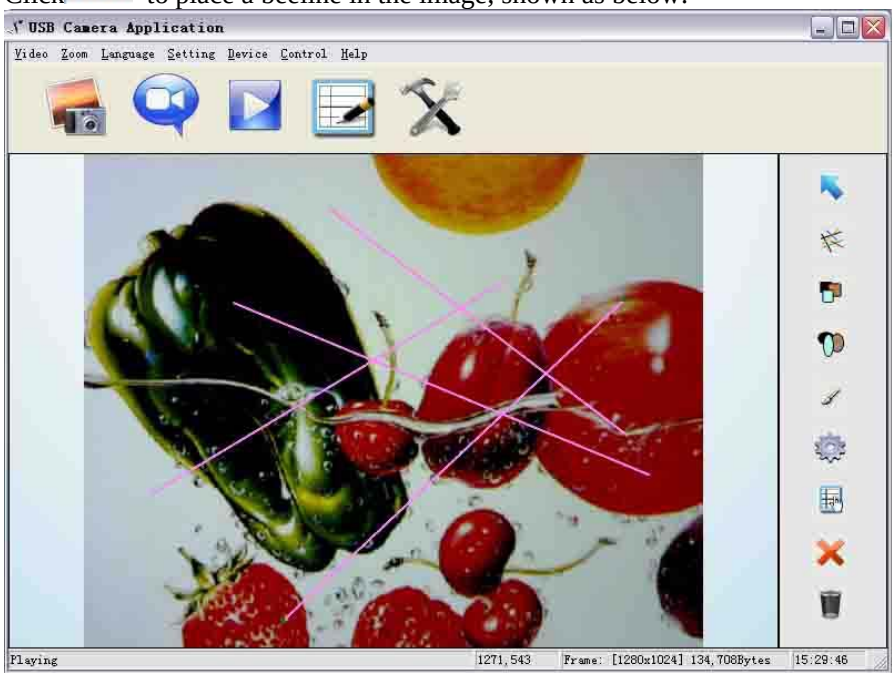


Graphic selection and move

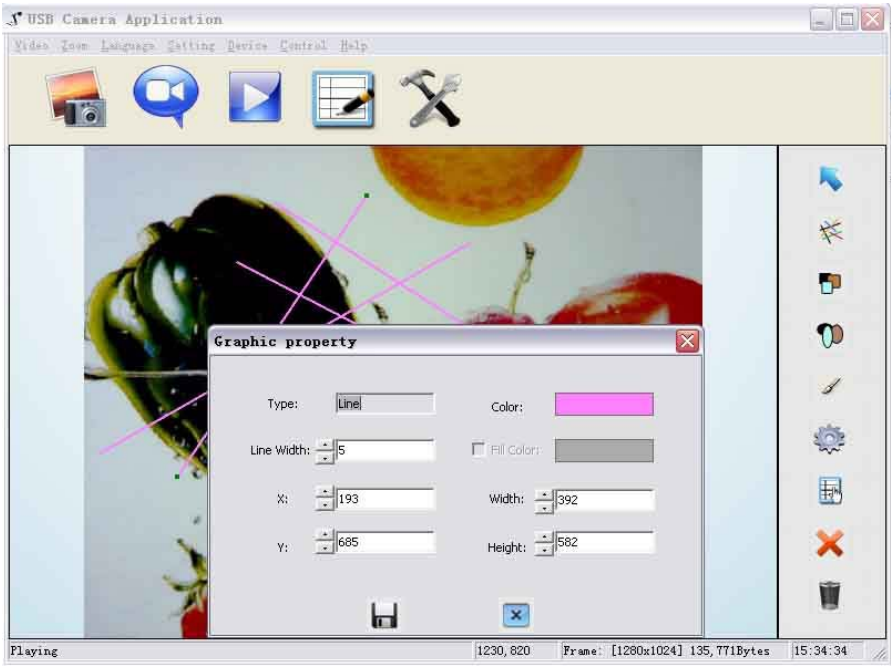
Click to choose a line, circle, rectangle or curve that placed in the image, then move to another place.

Line

Click to place a beeline in the image, shown as below:



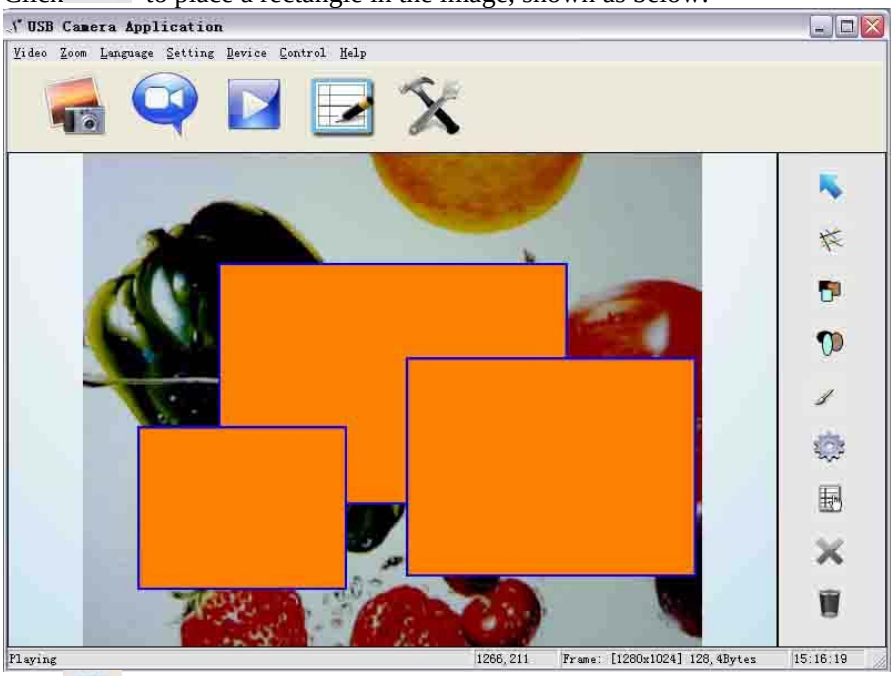
Click to change the setting of the chosen line:



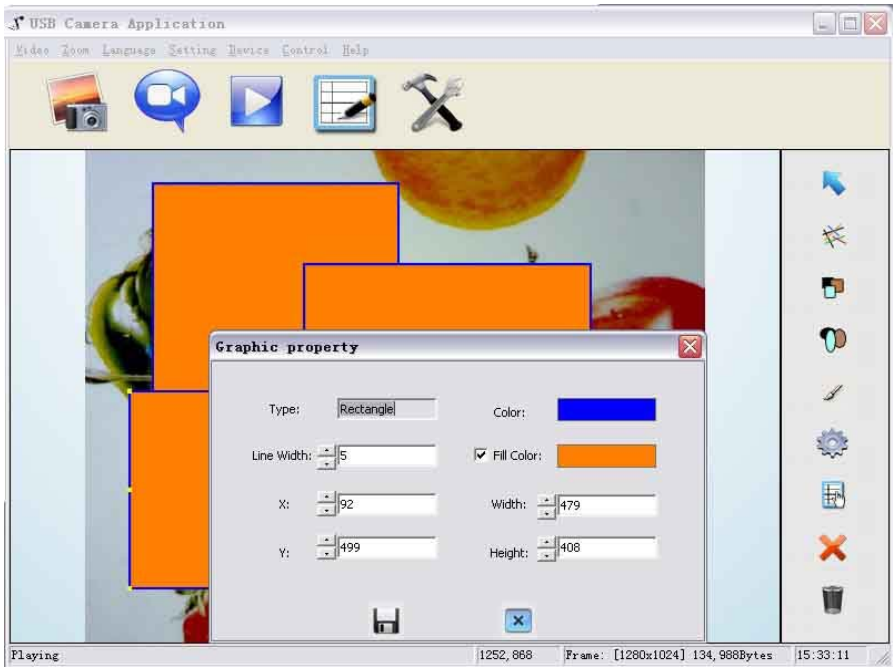
Line width: change the width of the line.
X, Y: change the position of the line.
Color: change the color of the line.
Width, Height: Change the angle of the line.

Rectangle

Click to place a rectangle in the image, shown as below:



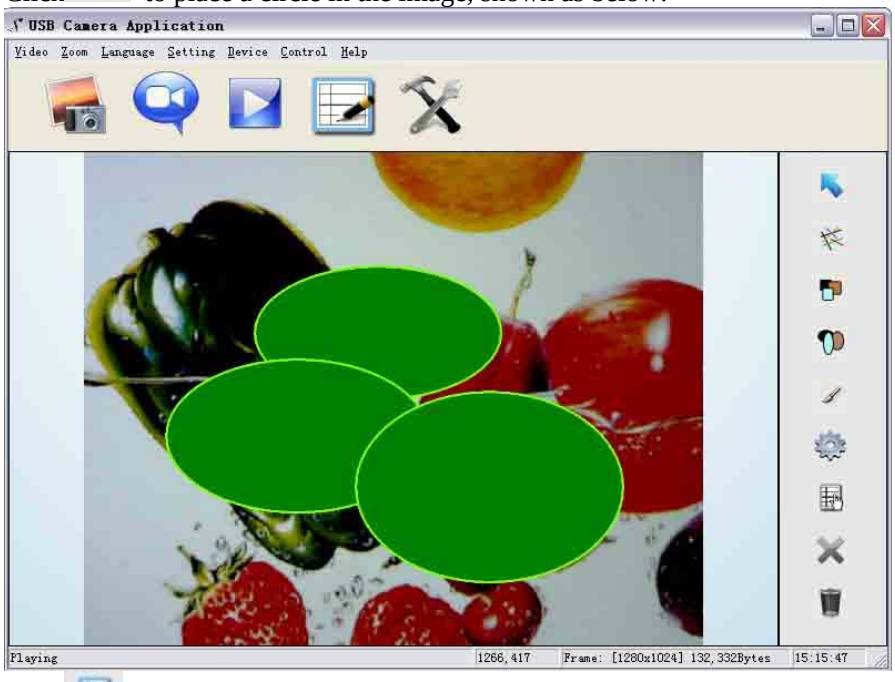
Click to change the setting of the chosen rectangle:



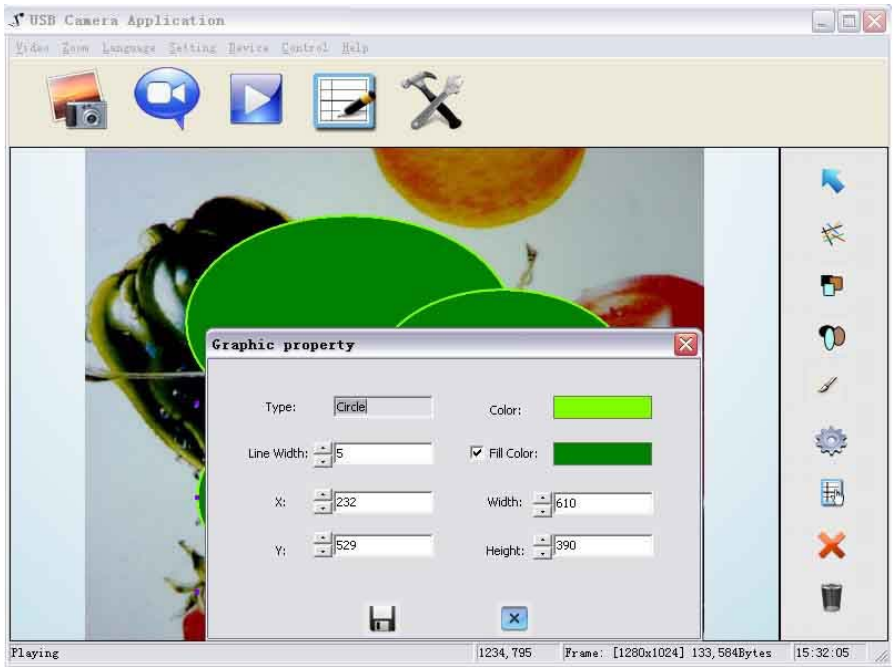
Line width: change the line width of the rectangle.
X, Y: change the position of the rectangle.
Color: change the line color of the rectangle.
Fill Color: Tick it to fill color in the rectangle.
Width, Height: Change the shape of the rectangle by changing the angle of two adjacent lines of the rectangle.

Circle

Click to place a circle in the image, shown as below:



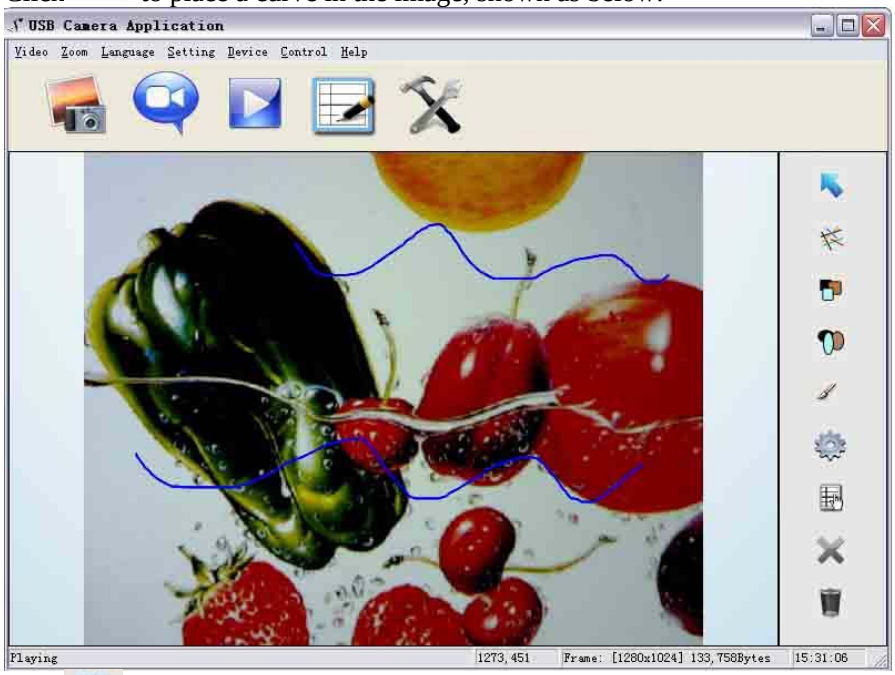
Click to change the setting of the chosen circle:



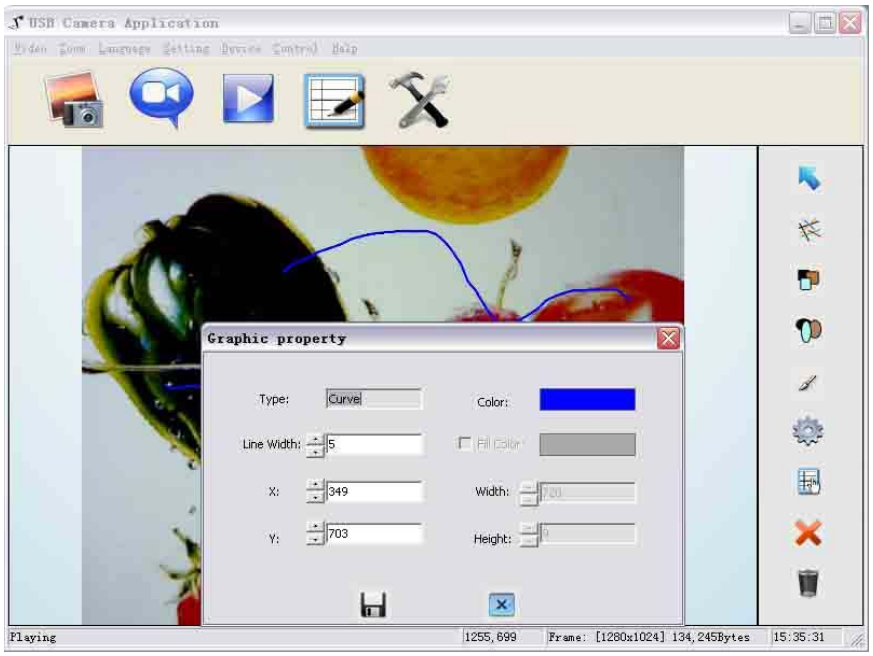
Line width: change the line width of the circle.
X, Y: change the position of the circle.
Color: change the line color of the circle.
Fill Color: Tick it to fill color in the circle.
Width, Height: change the size of the circle.

Curve

Click to place a curve in the image, shown as below:



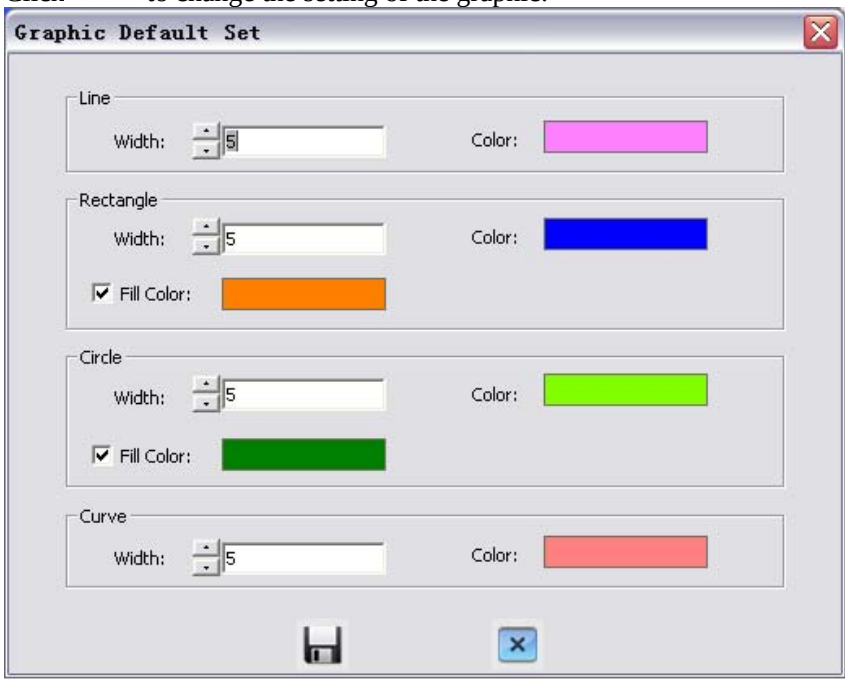
Click to change the setting of the chosen curve:



Line width: change the line width of the curve.
X, Y: change the position of the curve.
Color: change the line color of the curve.

Graphic default setting

Click to change the setting of the graphic:



Graphic delete

Click to delete the chosen graphic.

Delete al the graphic

Click to delete all graphic that placed in the image.

7. FEATURES

LIGHT

The PV 380 is the environmentally friendly product, it is RoHS compliant, which means it meets the rigorous European Union's requirements for restriction of the use of certain hazardous substances in electrical and electronic equipment. The lighting box of PV 380 adopts eco-friendly, low power consumption and long lasting LED lamps, which is cool to the touch and mercury content free.

ZOOM IN AND ZOOM OUT

9x optical zoom combined with 8x seamless digital zoom, the PV 380 enables you to view the finest details of any objects that are impossible to see with your naked eyes. The PV 380's advanced optical system features high speed auto focus capability that ensures instant auto focus when you quickly zoom in and out of any object. You can also manually adjust focus to satisfy
any special viewing needs by pressing "ZOOM+"or "ZOOM－".

FOCUS ADJUSTMENT

When the Visualizer is turned on the focus automatically adjusts to the stage, it is not necessary to readjust the focus if you are only working with flat materials (text, photos, etc.). Only 3D objects require a focus adjustment. Press the "AUTO" button to auto focus. Press the "FOCUS+" or
"FOCUS-" button to focus manually.

BRIGHTNESS ADJUSTMENT

If the image effect is not satisfactory, you can adjust the brightness to get a better image effect. Use the "BRIGHT +" or "BRIGHT -" button to adjust the brightness. To increase the brightness, press the "BRIGHT +" button. To decrease it, press the "BRIGHT -" button.

WHITE BALANCE ADJUSTMENT

Each time the lighting condition changes, the user should adjust the white balance of the image. Press the "AUTO" button to adjust the white balance automatically.

TEXT/PICTURE MODE

The Text enhancement feature provides the option to improve the readability of the text by improve the contrast of the text image via pressing the "T/P" button.

IMAGE FREEZE

The freeze function allows you to discretely prepare the next image without interrupting current presentation. Use "FREEZE" to freeze and unfreeze the image.

IMAGE MIRROR

The mirror function gives you a different perspective of an object.

SPLIT SCREEN

The split screen offers the capability of comparing two images or comparing two different views of one object side by side.

IMAGE SAVE

The PV 380 offers the opportunity of storing 12 images on board. You can recall them by just pressing one of the numerical buttons on the front panel or remote control.

IMAGE RECALL

By pressing the "**Recall**" button, all saved images is displayed in the thumbnail index mode for easy selection.

MULTIPLE INPUTS AND OUTPUTS

The VGA input allows a computer to be connected, inputting the computer signal. PV 380 also implements C-Video and S-Video connector, which can output the image from the document camera.

USB 2.0 PORT

The USB port can be used to store still images from the visualizer in a computer. No additional computer hardware is required. In this way, the visualizer can be used as a 3-D scanner for your computer. Connect the visualizer to your computer with the supplied USB cable. The Visualizer Software is available on the supplied CD-ROM.

USB IMAGE CAPTURE AND VIDEO RECORDING

The PV 380 is the document camera equipped with a USB 2.0 image capture and video recording system. Simply connect the PV 380 to a computer, with the software and driver we provided, you can easily preview, capture and save any images on your PC and Mac.

RS232 CONTROL

The RS232 terminal allows you to integrate the PV 380 into any sophisticated central control system. RS232 also enable you to control the PV 380 via computer.

8. SPECIFICATION

Model	**PV 380**
Sensor	1/3" CMOS
Pixels	2 Megapixel
Zoom	8x optical, 12x digital
Frame rate	15
Shooting area	Max: 13.5"x10.6", Min: 0.1"x0.1"
Focus	Auto/manual
Output resolution	XGA, SXGA
Resolution(Horizontal)	≥750 TV lines
White balance	Auto/manual

Color adjustment	Yes
Brightness adjustment	Yes
Image capture	Yes,12 images
Video recording	Yes(via USB)
Image mirror	Yes
Image split	Yes
Image freeze	Yes
Text mode	Yes
OSD	Yes
Inputs	VGA ×1, AUDIO ×1
Outputs	VGA ×1, C-VIDEO ×1, S-VIDEO ×1, AUDIO ×1
USB2.0	Slave×1(USB camera)
RS232	x1(computer controllable)
Remote control	Yes(360°controllable)
Light source	LED light box
Kensington lock	Yes
Operating temperature	32°F ~113°F
Dimensions	Folded:12.6"×6.6"×3.7", Setup:19.7"×6.6"×19.3"
Power supply	12V DC power adapter
Weight(net)	5.5lbs/2.5kg

9. TROUBLE-SHOOTING:

Symptoms	Possible causes/counter-measures
No image	1. Power cord is not properly connected. 2. Cables are not properly connected. 3. Power switch is not turned on. 4. Change the output resolution.
Image bending	1. Camera not in right position, adjust the camera. 2. Distortion of LCD display, press the “Auto adjust” of the LCD.
Out of focus or blurring	1. The object is too close to the lens.

image	2. Focus is on the top point of zoom, press ZOOM-. 3. Auto-focus is not on: press AUTO again. 4. Fog on the lens in damp climate. It will disappear gradually when the equipment warms up.

If the problem still remains after checking the above, consult your dealer or authorized service personally.

10. PACKING LIST

Item	Quantity
Power cord	1
Power adaptor(12V/2A)	1
VGA cable	1
Switch cable(RCA to mini)	1
USB cable(2.0)	1
Remote control	1
User manual(CD)	1

11. TECHNICAL SUPPORT

Wanin USA is committed to providing highest possible stand of customer service. We can be reached:

By Phone

Call us at 1-877-369-3130. Our technical support staff provides technical assistance from 9:00AM through 5:00PM Pacific Standard Time, Monday through Friday. Please gather the following information before calling:

- Product model name(s) and numbers
- Product serial number(s)
- Detailed questions or problem descriptions.

Online

Technical support is also available online at Wanin USA's web site at www.waninusa.com. You can enter your questions and concerns through our online form, email us at support@waninusa.com.

Wanin USA Inc.
12961 Ramona Blvd., Irwindale, CA 91706
Toll Free: 1-877-369-3130 Fax: 626-609-3380
E-mail: info@waninusa.com Web: www.waninusa.com

©2010 Wanin USA Inc. All Rights Reserved.